

**ABSTRACT OF THE DISCLOSURE**  
**EXTERNAL PROCESSOR FOR A DISTRIBUTED**  
**NETWORK ACCESS SYSTEM**

5           An external processor for a network access system having a  
programmable access device includes a service controller that provides at least one  
service for network traffic, a message processor that processes network messages  
for service processing by the service controller, and a programmable access device  
controller that programs the programmable access device in response to service  
10   controller processing. It is advantageous for the external processor to include  
primary and secondary service controllers for a particular service so that, if the  
primary service controller fails, the secondary service controller can provide the  
particular service for message received from the programmable access device. In  
preferred embodiments, the service controller further includes a reporting  
15   processor that provides an interface through which reporting messages received  
from the programmable access device can be communicated to the service  
controller and a signaling controller that transmits signals to configure network  
hardware to establish requested network connections. The external processor  
preferably further supports a service policy interface through which the service  
20   controller can request policy decisions from a possibly remote policy server.